

Middle School CTE Courses that lead to Secondary Programs of Study 2012-2013

Program Area	Middle School Courses			Secondary Programs of Study
Agricultural Education			8 th Grade Exploring Agricultural Sciences 0844	Animal Systems – Pre-Veterinary Animal Systems – Production Animals Power, Structures and Technical Systems Agri-Business, Food Products and Process Systems Environmental & Natural Resources Systems Plant Systems – Landscaping & Turf Science Plant Systems – Horticulture Production Agricultural Education Systems Landscape Design
Business Technology Education		Keyboarding 0710	Keyboarding 0810	Human Resources Business Management Business Financial Management & Accounting Business Analysis Administration & Information Support Communications Development Financial Planning Banking & Finance Public/Nonprofit Management & Administration Electronic Publishing Interactive Multimedia Web/Multimedia Management/Webmaster Programming & Software Development
		Document Formatting 0713	Document Formatting 0812	
Family & Consumer Sciences Education		7 th Grade Teen Living 0739	8 th Grade Teen Living 0839	Interior Design Fashion Design Teaching Training Services Pre K-Early Childhood Education Food & Beverage Services Consumer Services Counseling & Mental Health Services Family & Community Services Nutritional Counseling
Technology Engineering Education	5 th -6 th Grade Exploring Technology 0535 0635	7 th Grade Inventions & Innovations 0735	8 th Grade Technological Systems 0835	Engineering & Technology Science & Mathematics Web Design Production Design Precision Productions Precision Machining

Agricultural Education Career Clusters & Programs of Study 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Agriculture, Food, and Natural Resources	Animal Systems – Pre-Veterinary	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Small Animal Care 5172	Horse Science 5168	Veterinary Science 5176
	Animal Systems – Production Animals	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Advanced Principles of Agricultural Sciences 5155	Livestock Management 5177	Animal Biotechnology 5186
	Power, Structures and Technical Systems	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Agriculture Mechanics and Maintenance 5151	Agricultural Power and Equipment 5152	Agricultural Engineering 5178
	Agri-Business, Food Products and Process Systems	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Leadership Communications 5169	Agricultural Sales and Marketing 5153	Agricultural Business/Finance 5150 or Agricultural Economics** 5183
	Environmental and Natural Resources Systems	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Forestry Management 5165	Wildlife Management and Recreation 5174	Plant and Soil Science 5161
	Plant Systems – Landscaping and Turf Science	Agriscience* 5171 Or Principles of Horticultural Sciences* 5184	Landscaping & Turf Management 5163	Greenhouse Management 5167	Plant Biotechnology 5175
	Plant Systems – Horticulture Production	Agriscience* 5171 Or Principles of Horticultural Sciences* 5184	Aqua/Hydro 5159 or Floral Design 5164**	Greenhouse Management 5167	Plant Biotechnology 5175
	Agricultural Education Systems ***	Agriscience* 5171 Or Principles of Agricultural Sciences* 5154	Advanced Principles of Agricultural Sciences 5155	Leadership Communications 5169	Plant and Soil Science **** 5161
Architecture and Construction	Landscape Design	Agriscience* 5171 Or Principles of Horticultural Sciences* 5184	Landscaping & Turf Management 5163	Computer Aided Drafting I 3848 5750	Greenhouse Management 5167

* Indicates that credit can be earned in either one or the other course, not both. Agriscience satisfies one laboratory science credit in the area of life sciences required for graduation & college entrance and as a focus area and concentrator course.

** Requires a Special Program of Study Request to be included in an approved Program of Study.

*** System for students pursuing a career in teaching agricultural education or extension education.

**** Can select a different Dual Credit/Enrollment capstone course as a Special Program of Study. Can select from: Veterinary Science, Small Animal Care, Livestock Management, Agricultural Engineering, Agricultural Business/Finance, Agricultural Economics, or Greenhouse Management. (Note: Leadership Communication is already included in Program of Study.)

Business Technology Education

Career Clusters & Programs of Studies 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Business, Management, and Administration	Human Resources	Word Processing 3781	eBusiness Communication 3704	Interactive Multimedia Presentation 3746	Advanced Computer Applications 3770
	Business Management	Personal Finance 3766, 5613, 5038 Financial Planning 3717	Accounting I 3779	Business Management 3707	Virtual Enterprise International 3762 HQ, 3757 CTE 5062 HQ, 5057 CTE
	Business Financial Management & Accounting	Computer Applications 3718	Accounting I 3779	Accounting II 3780	Business Management 3707
	Business Analysis	Personal Finance 3766, 5613, 5038 Financial Planning 3717	Accounting I 3779	Spreadsheet Applications 3729 Business Economics 3755 HQ 3765 CTE	Banking and Finance 3756
	Administrative And Information Support	Document Formatting 3775 Database Design/Management 3735	Word Processing 3781	eBusiness Communication 3704	Administrative Management 3737
	Communications Development	Word Processing 3781	Business Principles 3771	eBusiness Communication 3704	Administrative Management 3737
Finance	Financial Planning	Computer Applications 3718	Personal Finance 3766, 5613, 5038 Financial Planning 3717	Business Economics 3755 HQ, 3765 CTE American Business Legal Systems 3719 HQ, 3726 CTE	Banking and Finance 3756
	Banking and Finance	Computer Applications 3718	Accounting I 3779	Personal Finance 3766, 5613, 5038 Financial Planning 3717	Banking and Finance 3756

Business Technology Education

Career Clusters & Programs of Studies 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Government and Public Administration	Public/ Nonprofit Management and Administration	Personal Finance 3766, 5613, 5038 Financial Planning 3717	eBusiness Communication 3704	Administrative Management 3737	Business Management 3707
Information Technology	Electronic Publishing	Word Processing 3781	eBusiness Communication 3704	Desktop Publishing 3741	Advanced Computer Applications 3770
	Interactive Multimedia	Computer Applications 3718	Interactive Multimedia Presentation 3746	Desktop Publishing 3741	Advanced Computer Applications 3770
	Web/ Multimedia Management/ Webmaster	Computer Applications 3718	Interactive Multimedia Presentation 3746	Web Design Essentials 3768	Web Design Applications 3769
	Programming and Software Development	Computer Applications 3718	Computer Programming I 3772	Computer Programming II 3773	Game Programming 3774

Family & Consumer Sciences

2009-2015 Career Clusters & Programs of Study 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Architecture & Construction	Interior Design	FACS* 5603 or PACE** 5624	Interior Design 5626	Housing 5614	Life Connections 5623
Arts, A/V Technology, & Communication	Fashion Design	FACS* 5603 or PACE** 5624	Fashion Design & Merchandising 5621	Textiles and Apparel 5619	Life Connections 5623
Education and Training	Teaching Training Services	FACS* 5603 or PACE** 5624	Child and Lifespan Development 5625	Life Connections 5623	Teaching as a Profession 5622
	Teaching Training Services – Pre K- Early Childhood Education	FACS* 5603 or PACE** 5624	Early Childhood Education Careers I 5650	Early Childhood Education Careers II 5660	Early Childhood Education Careers III 5661
Hospitality and Tourism	Food and Beverage Services	FACS* 5603 or PACE** 5624	Culinary Arts I 5663	Culinary Arts II 5664	Culinary Arts III 5665
Human Services	Consumer Services	FACS* 5603 or PACE** 5624	Consumer Economics 5602 HQ 5605 CTE	Personal Finance 5613, 5038, 3766	Life Connections 5623
	Counseling and Mental Health Services	FACS* 5603 or PACE** 5624	Child and Lifespan Development 5625	Family and Parenting 5606	Life Connections 5623
	Early Childhood Development and Services	FACS* 5603 or PACE** 5624	Early Childhood Education Careers I 5650	Early Childhood Education Careers II 5660	Early Childhood Education Careers III 5661
	Family and Community Services	FACS* 5603 or PACE** 5624	Child and Lifespan Development 5625	Nutrition and Foods 5609	Life Connections 5623
	Nutritional Counseling	FACS* 5603 or PACE** 5624	Nutrition and Foods 5609	Nutrition Science 5615 HQ 5616 HQ 5617 CTE 5618 CTE	Child and Lifespan Development 5625

* FACS Family and Consumer Sciences Education foundation course

** PACE . . . Personal, Academic and Career Excellence, a freshman transition course structured for 9th grade only.

Health Science Education Career Clusters & Programs of Study 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Health Science	Biotechnology and Forensic Science Research and Development	Health Science Education 5526	Diagnostic Medicine 5521	Anatomy & Physiology 5516 HQ 5517 CTE	Forensic Science 5523 HQ 5524 CTE
	Biotechnology Research and Development	Health Science Education 5526	Diagnostic Medicine 5521	Anatomy & Physiology 5516 HQ 5517 CTE	Biomedical Applications 5518 HQ 5519 CTE
	Diagnostic Services	Health Science Education 5526	Rehabilitation Careers 5515	Diagnostic Medicine 5521	Clinical Internship 5520
	Health Informatics	Health Science Education 5526	Diagnostic Medicine 5521	Health Information Technology 5525	Clinical Internship 5520
	Therapeutic Services	Health Science Education 5526	Medical Therapeutics 5527	Anatomy & Physiology 5516 HQ 5517 CTE	Nursing Education 5528
	Therapeutic Emergency Services	Health Science Education 5526	Medical Therapeutics 5527	Anatomy & Physiology 5516 HQ 5517 CTE	Emergency Medical Services 5522

Marketing Education

Career Clusters and Programs of Study 2012-2013

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Career Cluster	Program of Studies	CTE Coursework			
		9 th Grade	10 th Grade	11 th Grade	12 th Grade
Hospitality and Tourism	Hospitality and Tourism Management	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Travel and Tourism 5003	Hospitality Management 5026
	Recreation, Attractions, Sports and Entertainment	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Travel and Tourism 5003	Sports and Entertainment 5023
Marketing, Sales and Services	Global Marketing	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Retail Operations 5022 HQ 5052 CTE	International Business & Marketing 5015 HQ 5045 CTE
	Marketing Communication	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001	Advertising and Public Relations 5016
	Entrepreneurship	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001	Entrepreneurship 5005 HQ 5035 CTE
	Marketing Research	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001	Marketing Research and Analysis 5017
	Merchandising	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001	Retail Operations 5022 HQ 5052 CTE
	Marketing and Finance	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001	Personal Finance & Building Wealth 5037 Or Personal Finance 5038, 3766, 5613
	Organizational Management	Exploration of Organizational Leadership & Marketing 5039	Marketing I 5000 HQ 5030 CTE	Marketing II 5001 or Entrepreneurship 5005 HQ 5035 CTE	Virtual Enterprise International 5062 HQ, 5057 CTE 3762 HQ, 3757 CTE

Technology Engineering Education Career Clusters & Programs of Study 2012-2013

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Cluster	Program of Study	CTE Coursework			
		9 th Grade	10 th Grade	11 th Grade	12 th Grade
Science, Technology, Engineering, and Mathematics	Engineering and Technology	Foundations of Technology 3835	Technological Issues 3836	Advanced Design Applications 3838	Engineering Design 3839
	Science And Mathematics	Foundations of Technology 3835	Technological Issues 3836	Advanced Technological Applications 3837	Problems and Solutions in Technology 3813
Information Technology	Web Design	Foundations of Technology 3835	Web Site I - Foundations 3840	Web Page Design II - Site Designer 3841	Web Page Design III - eCommerce 3842
Manufacturing	Production Design	Foundations of Technology 3835	Computer Aided Drafting I 3848	Computer Aided Drafting II 3849	Advanced Drafting & Design 3850
	Precision Productions	Principles of Engineering 3845	Principles of Manufacturing 3843	Principles of Machining & Manufacturing 3844	Manufacturing Application 3847
	Precision Machining	Principles of Machining 3852	Digital Electronics 3846	Principles of Machining and Manufacturing 3844	Manufacturing Applications 3847

Trade and Industry Education

Career Clusters & Programs of Study 2012-2013

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Architecture & Construction	Carpentry	Career Management Success (CMS)* 5701	Construction Core 5814	Carpentry I 5748	Carpentry II 5749
	Electrical	CMS* 5701	Construction Core 5814	Electrical I 5815	Electrical II 5816
	HVAC/R	CMS* 5701	Construction Core 5814	HVAC/R I 5817	HVAC/R II 5818
	Masonry/Concrete	CMS* 5701	Construction Core 5814	Masonry I 5820 or Concrete I 5753	Masonry II 5821 or Concrete II 5754
	Plumbing	CMS* 5701	Construction Core 5814	Plumbing I 5822	Plumbing II 5823
	Welding	Construction Core 5814	Introduction to Welding 5819	Basic Principles of Welding 5747	Advanced Welding Applications & Certification 5746
	Design & Preconstruction	CMS* 5701	Computer Aided Drafting I 5750	Computer Aided Drafting II 5752	Advanced Drafting & Design 5745
Arts, A/V Technology, & Communication	Audio Technology	CMS* 5701	Audio Production I 5774	Audio Production II 5776	Audio Production III 5777
	Design Communications	Digital Arts & Design I 5825	Digital Arts & Design II 5827	Digital Arts & Design III 5828	Animation/ Simulation & Motion Graphic 5773
	Graphic Communications	CMS* 5701	Digital Arts & Design I 5825	Printing Graphics/ Technology I 5829	Printing Graphics/ Technology II 5772
	Journalism & Broadcasting	CMS* 5701	Broadcasting I 5778	Broadcasting II 5779	Broadcasting III 5824
Government & Public Administration	National Security	CMS* 5701	Criminal Justice I 5401	Criminal Justice II 5402	Criminal Justice III Forensic Science Investigation 5403
Hospitality and Tourism	Food and Beverage Services	CMS* 5701	Culinary Arts I 5386	Culinary Arts II 5387	Culinary Arts III 5388

*CMS may be taught but not required as part of POS.

Trade and Industry Education

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Human Services	Personal Care Services	CMS* 5701	Principles of Cosmetology 5391	Design Principles of Cosmetology 5394	Chemistry of Cosmetology 5392
		CMS* 5701	Barbering I 5344	Barbering II 5345	Barbering III 5346
Information Technology	Networking Systems	Information Technology Foundations 5842	Computer Systems 5841	Networking 5844	Cabling & Internetworking 5840 or IT Clinical 5843
	Web Design	CMS* 5701	Web Site I – Foundations 5847	Web Page Design II – Site Designer 5878	Web Page Design III – eCommerce 5839
	Programming/Gaming	CMS* 5701	Information Technology Foundations 5842	Programming & Logic I 5845	Programming & Logic II 5846
Law, Public Safety, Corrections and Security	Law Enforcement Services	CMS* 5701	Criminal Justice I 5401	Criminal Justice II 5402	Criminal Justice III Forensic Science Investigation 5403
	Security & Protective Services	Information Technology Foundations 5842	Computer Systems 5841	Networking 5844	Cabling & Internetworking 5840 or IT Clinical 5843
Manufacturing	Engineering PLTW	Introduction to Engineering Design 5793	Principles of Engineering 5791	Digital Electronics 5792 Aerospace Eng. 5796 Biotechnical Eng. 5797 Civil Eng. 5795 Computer Integrated Manufacturing 5794 (Choose One)	Engineering Design and Development 5798
	Operations & Maintenance	CMS* 5701	Introduction to Welding 5819	Basic Principles of Welding 5747	Advanced Welding Applications & Certification 5746
	Precision Productions	Principles of Engineering 5836	Principles of Manufacturing 5830	Principles of Machining & Manufacturing 5837	Manufacturing Applications 5835

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Trade and Industry Education

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Career Cluster	Program of Study	CTE Coursework			
		9 th grade	10 th grade	11 th grade	12 th grade
Manufacturing	Precision Machining	Principles of Machining 5838	Digital Electronics 5831	Principles of Machining & Manufacturing 5837	Manufacturing Applications 5835
	Industrial Maintenance	CMS* 5701	Introduction to Electromechanical 5834	Electromechanical I 5832	Electromechanical II 5833
	Production Design	CMS* 5701	Computer Aided Drafting I 5750	Computer Aided Drafting II 5752	Advanced Drafting & Design 5745
Transportation	Automotive Technology	Transportation Core 5812	Automotive: Brake 5726	Automotive: Suspension & Steering 5729	Automotive: Electrical/Electronics 5727 or Automotive: Engine Performance 5728
	Aviation Flight	CMS* 5701	Introduction to Aerospace 5809	Theory of Flight 5811	
	Aviation Maintenance	CMS* 5701	Aviation Maintenance I 5801	Aviation Maintenance II 5802	
	Collision Repair Technology	Transportation Core 5812	Collision Repair: Non-Structural 5803	Collision Repair: Structural 5805	Collision Repair: Painting & Refinishing 5804
	Diesel Technology	Transportation Core 5812	Diesel Preventive Maintenance 5808	Diesel Electrical/Electronics 5806	Diesel Engine 5807
	Distribution & Logistics	CMS* 5701	Principles of Transportation, Distribution, and Logistics 5810	Warehouse & Distribution I 5813	Warehouse & Distribution II 5722
	Leisure Craft/Small Engine Technology	Transportation Core 5812	2 & 4 Cycle Engine I 5723	2 & 4 Cycle Engine II 5724	2 & 4 Cycle Engine III 5725

*CMS may be taught but not required as part of POS.